

Metadata for Sunset Crater Volcano National Monument, Field Plots Data Base for Vegetation Mapping

Identification_Information:

Citation:

Citation_Information:

Originator: Kathryn Thomas

Originator: Monica Hansen (comp.)

Publication_Date: 2004

Publication_Time: Unknown

Title: Field Relve Plots: Sunset Crater Volcano National Monument Vegetation Mapping Project

Geospatial_Data_Presentation_Form: vector digital data

Other_Citation_Details: U.S. Geological Survey, Southwest Biological Science Center, Colorado Plateau Research Station

Online_Linkage: <http://biology.usgs.gov/npsveg/sucr/fielddata.html>

Larger_Work_Citation:

Citation_Information:

Originator: M. Hansen, J. Coles, K.A. Thomas, D. Cogan, M. Reid, J. Von Loh, K. Schultz

Publication_Date: 2004

Title: USGS-NPS National Vegetation Mapping Program: Sunset Crater Volcano National Monument, Arizona, Vegetation Classification and Distribution, Final Project Report

Geospatial_Data_Presentation_Form: report

Description:

Abstract: This spatial dataset in ESRI Coverage format maps field releve plot locations for the vegetation classification and descriptions of the vegetation map at Sunset Crater Volcano National Monument and in the surrounding environs as part of the National Vegetation Mapping Program.

Purpose: This data set was developed to locate the field points used for classification and description of vegetation types for NVCS associations and map labels used to develop the vegetation map at Sunset Crater Volcano National Monument and the surrounding environs.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199906

Ending_Date: 199908

Currentness_Reference: ground condition

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None planned

Spatial_Domain:

Description_of_Geographic_Extent: Sunset Crater Volcano National Monument and the environs.

Bounding_Coordinates:

West_Bounding_Coordinate: -111.578334

East_Bounding_Coordinate: -111.468496

North_Bounding_Coordinate: 35.406889

South_Bounding_Coordinate: 35.329189

Keywords:

Theme:

Theme_Keyword_Thesaurus: none

Theme_Keyword: Vegetation

Theme_Keyword: Relve

Theme_Keyword: Field Plots

Place:

USGS-NPS Vegetation Mapping Program
Sunset Crater Volcano National Monument

Place_Keyword_Thesaurus: none
Place_Keyword: North America
Place_Keyword: United States
Place_Keyword: Southwestern United States
Place_Keyword: Arizona
Place_Keyword: Coconino County
Place_Keyword: Sunset Crater National Monument

Access_Constraints: Data are available after research results have been published.

Use_Constraints: This data was compiled for government use and represent the results of data collection/processing for a specific USGS/BRD activity/project. The USGS/BRD makes no representation as to the suitability or accuracy of this data for any other purpose and disclaims any liability for errors that the data may contain. As such, it is only valid for its intended use, content, time, and accuracy specifications. While there are no explicit constraints on the use of this data, please exercise appropriate and professional judgment in the use and interpretation of this data. Acknowledgement of the originating agencies would be appreciated in products derived from this data.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Kathryn A. Thomas

Contact_Organization: USGS-SBSC-Colorado Plateau Research Station

Contact_Position: Project Leader, Vegetation Scientist

Contact_Address:

Address_Type: mailing and physical address

Address: U.S. Geological Survey

Address: Southwest Biological Science Center

Address: Colorado Plateau Research Center

Address: 2255 North Gemini Drive

City: Flagstaff

State_or_Province: Arizona

Postal_Code: 86001

Country: USA

Contact_Voice_Telephone: 928.556.7327

Contact_Facsimile_Telephone: 928.556.7500

Contact_Electronic_Mail_Address: Kathryn_A_Thomas@usgs.gov

Hours_of_Service: 8:00 a.m. to 5:00 p.m. (Arizona time) Monday through Friday

Contact_Instructions: E-mail

Browse_Graphic:

Browse_Graphic_File_Name: <http://biology.usgs.gov/npsveg/sucr/images/sucrplot.jpg>

Browse_Graphic_File_Description: 669 kbyte file showing vegetation associations and locations of vegetation plot samples

Browse_Graphic_File_Type: JPG

Native_Data_Set_Environment: Microsoft Windows 2000 Version 5.0 (Build 2195) Service Pack 4; ESRI ArcCatalog 8.2.0.700

Cross_Reference:

Citation_Information:

Originator: M. Hansen, J. Coles, K.A. Thomas, D. Cogan, M. Reid, J. Von Loh, K. Schultz

Publication_Date: 2004

Title: USGS-NPS National Vegetation Mapping Program: Sunset Crater Volcano National Monument, Arizona, Vegetation Classification and Distribution, Final Project Report

Geospatial_Data_Presentation_Form: report

Edition: USGS Biological Resources Division Technical Report

Cross_Reference:

Citation_Information:

Originator: Kathryn Thomas, U.S. Geological Survey, Southwest Biological Science Center, Colorado Plateau Field Station, Monica Hansen, U.S. Geological Survey, Southwest Biological Science Center, Colorado Plateau Field Station

USGS-NPS Vegetation Mapping Program
Sunset Crater Volcano National Monument

Publication_Date: 2003

Title: SUCR_FieldReleve_database.mdb

Geospatial_Data_Presentation_Form: database

Taxonomy:

Keywords/Taxon:

Taxonomic_Keyword_Thesaurus: None

Taxonomic_Keywords: plant communities

Taxonomic_Classification:

Taxon_Rank_Name: Kingdom

Taxon_Rank_Value: Plantae

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report: Dataset was quality checked in a spatial environment and through reviewing data entry.

Logical_Consistency_Report: Dataset was quality checked by visually inspecting the dataset in a geographic information system (GIS).

Completeness_Report: Data collection is complete with no exclusions

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report: Visual inspection was performed on the dataset to ensure accuracy of all sampling locations

Lineage:

Process_Step:

Process_Description: Two CPRS plant ecologists conducted field surveys from mid-June thru mid-August 1999 and sampled 114 field plots in the project area. A gradsect sampling design was used to divide the park into 'environmental types' to stratify for field sampling. The gradsect was developed using terrain types and four aspect and elevation categories developed from a Digital Elevational Model (DEM). The result was 40 unique 'environmental types'. A total of over 100 potential plot locations were allocated based on the percent of the unique environmental types and were used to guide sampling. Within our environmental types we initially determined placement of plots based on road accessibility and land ownership access. Typically we measured 1,000m2 circular relevés; however, in areas of dense vegetation we would lower our plot size to 400m2. At the center of these relevés we measured the UTM's via a GPS unit. Several environmental types were inaccessible due to extensive sharp lava beds causing high safety risks for the field crew. The implementation of laser binoculars, a new technology, was lent to the program from Karl Brown of the Center of Biological Informatics (CBI). The binoculars provide locality information in UTM's by targeting a location. The laser binoculars transfer information in UTM's by triangulation, using distance and azimuth of targeted locations in conjunction with the GPS Plugger system. Additional laser plots were completed in SUCR until all environmental types within the gradsect sampling area were completed. All releve plot codes and UTMS were results entered into a table in a Microsoft Access database. The Microsoft Access database table was then converted to a text file and formatted as an ArcInfo generate file. The points coverage was then created using ArcToolbox generate.

Process_Date: 1999 to 2003

Process_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Kathryn Thomas

Contact_Organization: USGS-SBSC-Colorado Plateau Research Station

Contact_Position: Project leader

Contact_Address:

Address_Type: mailing and physical address

Address: U.S. Geological Survey

Address: Southwest Biological Science Center

Address: Colorado Plateau Research Station

Address: 2255 N. Gemini Dr.

City: Flagstaff

State_or_Province: Arizona

Postal_Code: 86001

USGS-NPS Vegetation Mapping Program
Sunset Crater Volcano National Monument

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Contact_Facsimile_Telephone: 928.556.7500
Contact_Electronic_Mail_Address: Kathryn_A_Thomas@usgs.gov
Hours_of_Service: 8:00 a.m. to 5:00 p.m. (Arizona time) Monday through Friday
Contact_Instructions: E-mail

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Entity point
Point_and_Vector_Object_Count: 114
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Point
Point_and_Vector_Object_Count: 4

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 12
Transverse_Mercator:
Scale_Factor_at_Central_Meridian: 0.999600
Longitude_of_Central_Meridian: -111.000000
Latitude_of_Projection_Origin: 0.000000
False_Easting: 500000.000000
False_Northing: 0.000000
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 0.000005
Ordinate_Resolution: 0.000005
Planar_Distance_Units: meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Entity_Type_Label: sucr_releve.pat
Entity_Type_Definition: This is a listing of all releve plot locations within the Sunset Crater Volcano National Monument project area
Entity_Type_Definition_Source: User defined
Attribute:
Attribute_Label: FID
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers that are automatically generated.
Attribute:

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Attribute_Label: Shape
Attribute_Definition: Feature geometry.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Coordinates defining the features.

Attribute:

Attribute_Label: AREA
Attribute_Definition: Area of feature in internal units squared.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Area is always zero for point coverages. Values are automatically generated.

Attribute:

Attribute_Label: PERIMETER
Attribute_Definition: Perimeter of feature in internal units.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Perimeter is always zero for point coverages. Values are automatically generated.

Attribute:

Attribute_Label: SUCR_RELEVE#
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers that are automatically generated.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: 114
Attribute_Units_of_Measure: number

Attribute:

Attribute_Label: SUCR_RELEVE-ID
Attribute_Definition: Internal feature number.
Attribute_Definition_Source: ESRI
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: 114
Attribute_Units_of_Measure: number

Attribute_Domain_Values:
Unrepresentable_Domain: Sequential unique whole numbers that are automatically generated.

Attribute:

Attribute_Label: X-COORD
Attribute_Definition: The geographical coordinates for UTM Easting (x-coordinate) collected at each accuracy assessment field point in NAD83 Zone12 using Garmin 45XL.
Attribute_Definition_Source: The Universal Transverse Mercator (UTM) Grid USGS Fact Sheet 077-01 (August 2001)(<http://mac.usgs.gov/mac/isb/pubs/factsheets/fs07701.html>)
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 447488
Range_Domain_Maximum: 457421
Attribute_Units_of_Measure: number

Attribute:

Attribute_Label: Y-COORD
Attribute_Definition: The geographical coordinates for UTM Northing (y-coordinate) collected at each accuracy assessment field point in NAD83 Zone12 using Garmin 45XL.
Attribute_Definition_Source: The Universal Transverse Mercator (UTM) Grid USGS Fact Sheet 077-01 (August 2001)(<http://mac.usgs.gov/mac/isb/pubs/factsheets/fs07701.html>)

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Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 3909703

Range_Domain_Maximum: 3918268

Attribute_Units_of_Measure: number

Attribute:

Attribute_Label: PLOT_CODE

Attribute_Definition: Plot releve code developed as a unique identifier for the center of each releve point.

Attribute_Definition_Source: User Defined

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: SC-001

Range_Domain_Maximum: SC-114

Attribute_Units_of_Measure: "SC-" and number

Distribution_Information:

Distributor:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator

Contact_Address:

Address_Type: mailing and physical address

Address: U.S. Geological Survey, Center for Biological Informatics, MS 302, Room 8000, Building 810, Denver
Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Resource_Description: Downloadable Data

Distribution_Liability: Although these data have been processed successfully on a computer system at the USGS-SBSC-Colorado Plateau Research Station, no warranty expressed or implied is made regarding the accuracy or utility of these data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any warranty. This disclaimer applies both to individual use of these data and aggregate use with other data. It is strongly recommended that these data be directly acquired from a U.S. Geological Survey server, and not indirectly through other sources that may have changed these data in some way. It is also strongly recommended that careful attention be paid to the contents of the metadata file associated with these data. The U.S. Geological Survey and the SBSC-Colorado Plateau Research Station shall not be held liable for improper or incorrect use of these data described and/or contained herein.

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name: HTML

Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

Network_Address:

Network_Resource_Name: <http://biology.usgs.gov/npsveg/sucr/fielddata.html>

Fees: none

Metadata_Reference_Information:

Metadata_Date: 20040209

Metadata_Review_Date: 20050519

Metadata_Contact:

USGS-NPS Vegetation Mapping Program
Sunset Crater Volcano National Monument

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator

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Address: U.S. Geological Survey, Center for Biological Informatics, MS 302, Room 8000, Building 810, Denver
Federal Center

City: Denver

State_or_Province: Colorado

Postal_Code: 80225

Country: USA

Contact_Voice_Telephone: (303) 202-4220

Contact_Facsimile_Telephone: (303) 202-4219

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Metadata_Standard_Name: Content Standard for Digital Geospatial Metadata, 1998, Part 1: Biological Data Profile,
1999 (FGDC-STD-001.1-1999)

Metadata_Standard_Version: FGDC-STD-001-1999